



SEQUENCE LISTING

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<110> Agarwal, Pankaj
Lee, Judithann M.
Smith, Randall F.
White, John R.

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<212> DNA

<213> Homo sapiens

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35      40      45
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115     120     125
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Lys Val His Leu Ile Gly His Ser Leu Gly Ala His Leu Ala Gly Glu
165     170     175
Ala Gly Ser Arg Ile Pro Gly Leu Gly Arg Ile Thr Gly Leu Asp Pro
180     185     190
Ala Gly Pro Phe Phe His Asn Thr Pro Lys Glu Val Arg Leu Asp Pro
195     200     205
Ser Asp Ala Asn Phe Val Asp Val Ile His Thr Asn Ala Ala Arg Ile
210     215     220
Leu Phe Glu Leu Gly Val Gly Thr Ile Asp Ala Cys Gly His Leu Asp
225     230     235     240
Phe Tyr Pro Asn Gly Gly Lys His Met Pro Gly Cys Glu Asp Leu Ile
245     250     255
Thr Pro Leu Leu Lys Phe Asn Phe Asn Ala Tyr Lys Lys Glu Met Ala
260     265     270
Ser Phe Phe Asp Cys Asn His Ala Arg Ser Tyr Gln Phe Tyr Ala Glu
275     280     285
Ser Ile Leu Asn Pro Asp Ala Phe Ile Ala Tyr Pro Cys Arg Ser Tyr
290     295     300
Thr Ser Phe Lys Ala Gly Thr Cys Val Gly Cys Ala Asp Leu Leu His
305     310     315     320

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Arg	Ile	Asp	Lys	Ile	Gly	Ser	His	Thr	Ser	His	Val	Phe	Leu	Thr	Leu	
				325						330					335	
Ser	Leu	Pro	Phe	Leu	Leu	Val	Ser	Leu	Tyr	Leu	Gly	Trp	Arg	His	Lys	
			340					345					350			
Leu	Ser	Val	Lys	Leu	Ser	Gly	Ser	Glu	Val	Thr	Gln	Gly	Thr	Val	Phe	
			355				360					365				
Leu	Arg	Val	Gly	Gly	Ala	Val	Arg	Lys	Thr	Gly	Glu	Phe	Ala	Ile	Val	
	370					375					380					
Ser	Gly	Lys	Leu	Glu	Pro	Gly	Met	Thr	Tyr	Thr	Lys	Leu	Ile	Asp	Ala	
385					390					395					400	
Asp	Val	Asn	Val	Gly	Asn	Ile	Thr	Ser	Val	Gln	Phe	Ile	Trp	Lys	Lys	
				405					410					415		
His	Leu	Phe	Glu	Asp	Ser	Gln	Asn	Lys	Leu	Gly	Ala	Glu	Met	Val	Ile	
			420					425						430		
Asn	Thr	Ser	Gly	Lys	Tyr	Gly	Tyr	Lys	Ser	Thr	Phe	Cys	Ser	Gln	Asp	
		435					440					445				
Ile	Met	Gly	Pro	Asn	Ile	Leu	Gln	Asn	Leu	Lys	Pro	Cys				
	450					455					460					

<210> 24
 <211> 308
 <212> PRT
 <213> Homo sapiens

<400> 24

Met	Pro	Phe	Leu	Gln	Leu	Lys	Gly	Arg	Ala	Thr	Pro	Pro	Ser	Trp	Arg	
1				5					10					15		
His	Asp	Ser	Arg	Ser	Leu	Val	His	Leu	Leu	Asp	Gly	Lys	Glu	Gly	Val	
			20					25					30			
Trp	Asp	Thr	Thr	Gly	Tyr	Ala	Leu	Gly	Ser	Arg	Glu	Ser	Leu	Asn	Pro	
		35				40						45				
Asp	Met	Gly	Ile	Gly	Asp	Pro	His	Gly	His	Ser	Thr	Val	His	Thr	Arg	
	50					55					60					
Glu	Ala	Gly	Thr	Ala	Cys	Pro	Leu	Gln	Leu	Leu	Gly	Ala	Arg	Glu	Ala	
65					70					75					80	
Ser	Leu	Leu	Ala	Cys	Gly	Ile	Cys	Gln	Ala	Ser	Gly	Gln	Ile	Phe	Ile	
			85						90					95		
Thr	Gln	Thr	Leu	Gly	Ile	Lys	Gly	Tyr	Arg	Thr	Val	Val	Ala	Leu	Asp	
			100					105					110			
Lys	Val	Pro	Glu	Asp	Val	Gln	Glu	Tyr	Ser	Trp	Tyr	Trp	Gly	Ala	Asn	
		115					120					125				
Asp	Ser	Ala	Gly	Asn	Met	Ile	Ile	Ser	His	Lys	Pro	Pro	Ser	Ala	Gln	
	130					135					140					
Gln	Pro	Gly	Pro	Met	Tyr	Thr	Gly	Arg	Glu	Arg	Val	Asn	Arg	Glu	Gly	
145					150					155					160	
Ser	Leu	Leu	Ile	Arg	Pro	Thr	Ala	Leu	Asn	Asp	Thr	Gly	Asn	Tyr	Thr	
				165					170					175		
Val	Arg	Val	Val	Ala	Gly	Asn	Glu	Thr	Gln	Arg	Ala	Thr	Gly	Trp	Leu	
			180					185					190			
Glu	Val	Leu	Asp	Gly	Pro	Asp	Tyr	Val	Leu	Leu	Arg	Ser	Asn	Pro	Asp	
		195					200					205				
Asp	Phe	Asn	Gly	Ile	Val	Thr	Ala	Glu	Ile	Gly	Ser	Gln	Val	Glu	Met	
	210					215					220					
Glu	Cys	Ile	Cys	Tyr	Ser	Phe	Leu	Asp	Leu	Lys	Tyr	His	Trp	Ile	His	
225					230					235					240	

Asn	Gly	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ala	Lys	Met	Asn	Leu	Ser	Ser	
				245					250					255		
Leu	Ala	Trp	Glu	Gln	Met	Gly	Arg	Tyr	Arg	Cys	Thr	Val	Glu	Asn	Pro	
			260					265					270			
Val	Thr	Gln	Leu	Ile	Met	Tyr	Met	Asp	Val	Arg	Ile	Gln	Ala	Pro	His	
		275					280					285				
Glu	Cys	Ser	Ser	Ser	Pro	Pro	Gly	Ser	Cys	Phe	Ala	His	Leu	Pro	Ala	
	290					295					300					
Ser	Met	Pro	Cys													
305																

<210> 25
 <211> 457
 <212> PRT
 <213> Homo sapiens

<400> 25

Met	Asp	Leu	Ser	Arg	Pro	Arg	Trp	Ser	Leu	Trp	Arg	Arg	Val	Phe	Leu	
1				5					10					15		
Met	Ala	Ser	Leu	Ala	Cys	Gly	Ile	Cys	Gln	Ala	Ser	Gly	Gln	Ile		
			20				25					30				
Phe	Ile	Thr	Gln	Thr	Leu	Gly	Ile	Lys	Gly	Tyr	Arg	Thr	Val	Val	Ala	
		35				40						45				
Leu	Asp	Lys	Val	Pro	Glu	Asp	Val	Gln	Glu	Tyr	Ser	Trp	Tyr	Trp	Gly	
	50					55				60						
Ala	Asn	Asp	Ser	Ala	Gly	Asn	Met	Ile	Ile	Ser	His	Lys	Pro	Pro	Ser	
65					70					75					80	
Ala	Gln	Gln	Pro	Gly	Pro	Met	Tyr	Thr	Gly	Arg	Glu	Arg	Val	Asn	Arg	
				85					90					95		
Glu	Gly	Ser	Leu	Leu	Ile	Arg	Pro	Thr	Ala	Leu	Asn	Asp	Thr	Gly	Asn	
			100					105					110			
Tyr	Thr	Val	Arg	Val	Val	Ala	Gly	Asn	Glu	Thr	Gln	Arg	Ala	Thr	Gly	
		115					120					125				
Trp	Leu	Glu	Val	Leu	Glu	Leu	Gly	Ser	Asn	Leu	Gly	Ile	Ser	Val	Asn	
	130					135					140					
Ala	Ser	Ser	Leu	Val	Glu	Asn	Met	Asp	Ser	Val	Ala	Ala	Asp	Cys	Leu	
145					150					155					160	
Thr	Asn	Val	Thr	Asn	Ile	Thr	Trp	Tyr	Val	Asn	Asp	Val	Pro	Thr	Ser	
				165					170					175		
Ser	Ser	Asp	Arg	Met	Thr	Ile	Ser	Pro	Asp	Gly	Lys	Thr	Leu	Val	Ile	
			180					185					190			
Leu	Arg	Val	Ser	Arg	Tyr	Asp	Arg	Thr	Ile	Gln	Cys	Met	Ile	Glu	Ser	
		195					200					205				
Phe	Pro	Glu	Ile	Phe	Gln	Arg	Ser	Glu	Arg	Ile	Ser	Leu	Thr	Val	Ala	
	210					215					220					
Tyr	Gly	Pro	Asp	Tyr	Val	Leu	Leu	Arg	Ser	Asn	Pro	Asp	Asp	Phe	Asn	
225					230					235					240	
Gly	Ile	Val	Thr	Ala	Glu	Ile	Gly	Ser	Gln	Val	Glu	Met	Glu	Cys	Ile	
				245					250					255		
Cys	Tyr	Ser	Phe	Leu	Asp	Leu	Lys	Tyr	His	Trp	Ile	His	Asn	Gly	Ser	
			260					265					270			
Leu	Leu	Asn	Phe	Ser	Asp	Ala	Lys	Met	Asn	Leu	Ser	Ser	Leu	Ala	Trp	
		275					280					285				
Glu	Gln	Met	Gly	Arg	Tyr	Arg	Cys	Thr	Val	Glu	Asn	Pro	Val	Thr	Gln	
	290					295					300					

Leu	Ile	Met	Tyr	Met	Asp	Val	Arg	Ile	Gln	Ala	Pro	His	Glu	Cys	Pro
305					310					315					320
Leu	Pro	Ser	Gly	Ile	Leu	Pro	Val	Val	His	Arg	Asp	Phe	Ser	Ile	Ser
			325						330					335	
Gly	Ser	Met	Val	Met	Phe	Leu	Ile	Met	Leu	Thr	Val	Leu	Gly	Gly	Val
			340					345					350		
Tyr	Ile	Cys	Gly	Val	Leu	Ile	His	Ala	Leu	Ile	Asn	His	Tyr	Ser	Ile
		355					360					365			
Arg	Cys	Pro	His	Cys	Ser	Gly	Thr	Arg	Val	Gly	Cys	Trp	Leu	Gly	Ala
		370				375					380				
Gly	Thr	Gln	Glu	Pro	Ala	Leu	Pro	Pro	Glu	Gly	Lys	Gln	Ser	Gln	Lys
385					390					395					400
Gly	Arg	Asp	Lys	Pro	Gly	Thr	Arg	Leu	Ser	Gly	Ile	Ile	Trp	Gly	Arg
				405					410					415	
Gln	Ile	Ser	Pro	Gln	Asp	Leu	Lys	Leu	Met	Gly	Ala	Arg	Glu	Gly	Leu
			420					425					430		
Glu	Ser	Ala	Met	Val	Leu	Asn	Ser	Cys	Gly	Val	Ser	Ser	Ser	Asn	Phe
		435					440					445			
Pro	Ser	Leu	Cys	Val	Tyr	Lys	Gly	Tyr							
		450				455									

<210> 26
 <211> 704
 <212> PRT
 <213> Homo sapiens

<400> 26

Met	Leu	His	Asp	Gly	Leu	Thr	Ala	Pro	Asp	Gly	Cys	Gly	Ile	Tyr	Ser
1				5					10					15	
Leu	Thr	Gly	Arg	Glu	Val	Leu	Thr	Pro	Phe	Pro	Gly	Leu	Gly	Thr	Ala
			20					25					30		
Ala	Ala	Pro	Ala	Gln	Gly	Gly	Ala	His	Leu	Lys	Gln	Cys	Asp	Leu	Leu
		35				40					45				
Lys	Leu	Ser	Arg	Arg	Gln	Lys	Gln	Leu	Cys	Arg	Arg	Glu	Pro	Gly	Leu
	50				55					60					
Ala	Glu	Thr	Leu	Arg	Asp	Ala	Ala	His	Leu	Gly	Leu	Leu	Glu	Cys	Gln
65				70						75					80
Phe	Gln	Phe	Arg	His	Glu	Arg	Trp	Asn	Cys	Ser	Leu	Glu	Gly	Arg	Met
			85					90						95	
Gly	Leu	Leu	Lys	Arg	Gly	Phe	Lys	Glu	Thr	Ala	Phe	Leu	Tyr	Ala	Val
			100				105						110		
Ser	Ser	Ala	Ala	Leu	Thr	His	Thr	Leu	Ala	Arg	Ala	Cys	Ser	Ala	Gly
		115				120						125			
Arg	Met	Glu	Arg	Cys	Thr	Cys	Asp	Asp	Ser	Pro	Gly	Leu	Glu	Ser	Arg
	130				135						140				
Gln	Ala	Trp	Gln	Trp	Gly	Val	Cys	Gly	Asp	Asn	Leu	Lys	Tyr	Ser	Thr
145				150					155						160
Lys	Phe	Leu	Ser	Asn	Phe	Leu	Gly	Ser	Lys	Arg	Gly	Asn	Lys	Asp	Leu
			165					170						175	
Arg	Ala	Arg	Ala	Asp	Ala	His	Asn	Thr	His	Val	Gly	Ile	Lys	Ala	Val
		180					185						190		
Lys	Ser	Gly	Leu	Arg	Thr	Thr	Cys	Lys	Cys	His	Gly	Val	Ser	Gly	Ser
		195				200						205			
Cys	Ala	Val	Arg	Thr	Cys	Trp	Lys	Gln	Leu	Ser	Pro	Phe	Arg	Glu	Thr
	210					215					220				

Gly	Gln	Val	Leu	Lys	Leu	Arg	Tyr	Asp	Ser	Ala	Val	Lys	Val	Ser	Ser	
225					230					235					240	
Ala	Thr	Asn	Glu	Ala	Leu	Gly	Arg	Leu	Glu	Leu	Trp	Ala	Pro	Ala	Arg	
				245					250					255		
Gln	Gly	Ser	Leu	Thr	Lys	Gly	Leu	Ala	Pro	Arg	Ser	Gly	Asp	Leu	Val	
			260					265					270			
Tyr	Met	Glu	Asp	Ser	Pro	Ser	Phe	Cys	Arg	Pro	Ser	Lys	Tyr	Ser	Pro	
		275					280					285				
Gly	Thr	Ala	Gly	Arg	Val	Cys	Ser	Arg	Glu	Ala	Ser	Cys	Ser	Ser	Leu	
	290					295					300					
Cys	Cys	Gly	Arg	Gly	Tyr	Asp	Thr	Gln	Ser	Arg	Leu	Val	Ala	Phe	Ser	
305					310					315					320	
Cys	His	Cys	Gln	Val	Gln	Trp	Cys	Cys	Tyr	Val	Glu	Cys	Gln	Gln	Cys	
				325					330					335		
Val	Gln	Glu	Glu	Leu	Val	Tyr	Thr	Cys	Lys	His	Ala	Met	Gly	Pro	Val	
			340					345					350			
Gly	Phe	Pro	Arg	Gln	Cys	Gln	Gly	Ala	Phe	Phe	Glu	Ser	Ser	Pro	Gly	
		355					360					365				
Gln	Thr	Arg	Ala	Arg	Leu	Thr	Gly	Arg	Glu	Val	Leu	Thr	Pro	Phe	Pro	
	370					375					380					
Gly	Leu	Gly	Thr	Ala	Ala	Pro	Ala	Gln	Gly	Gly	Ala	His	Leu	Lys		
385					390				395					400		
Gln	Cys	Asp	Leu	Leu	Lys	Leu	Ser	Arg	Arg	Gln	Lys	Gln	Leu	Cys	Arg	
				405					410					415		
Arg	Glu	Pro	Gly	Leu	Ala	Glu	Thr	Leu	Arg	Asp	Ala	Ala	His	Leu	Gly	
			420					425					430			
Leu	Leu	Glu	Cys	Gln	Phe	Gln	Phe	Arg	His	Glu	Arg	Trp	Asn	Cys	Ser	
		435					440					445				
Leu	Glu	Gly	Arg	Met	Gly	Leu	Leu	Lys	Arg	Gly	Phe	Lys	Glu	Thr	Ala	
	450					455					460					
Phe	Leu	Tyr	Ala	Val	Ser	Ser	Ala	Ala	Leu	Thr	His	Thr	Leu	Ala	Arg	
465					470					475					480	
Ala	Cys	Ser	Ala	Gly	Arg	Met	Glu	Arg	Cys	Thr	Cys	Asp	Asp	Ser	Pro	
				485					490					495		
Gly	Leu	Glu	Ser	Arg	Gln	Ala	Trp	Gln	Trp	Gly	Val	Cys	Gly	Asp	Asn	
			500					505					510			
Leu	Lys	Tyr	Ser	Thr	Lys	Phe	Leu	Ser	Asn	Phe	Leu	Gly	Ser	Lys	Arg	
		515					520					525				
Gly	Asn	Lys	Asp	Leu	Arg	Ala	Arg	Ala	Asp	Ala	His	Asn	Thr	His	Val	
	530					535					540					
Gly	Ile	Lys	Ala	Val	Lys	Ser	Gly	Leu	Arg	Thr	Thr	Cys	Lys	Cys	His	
545					550				555						560	
Gly	Val	Ser	Gly	Ser	Cys	Ala	Val	Arg	Thr	Cys	Trp	Lys	Gln	Leu	Ser	
				565					570					575		
Pro	Phe	Arg	Glu	Thr	Gly	Gln	Val	Leu	Lys	Leu	Arg	Tyr	Asp	Ser	Ala	
			580					585					590			
Val	Lys	Val	Ser	Ser	Ala	Thr	Asn	Glu	Ala	Leu	Gly	Arg	Leu	Glu	Leu	
		595					600					605				
Trp	Ala	Pro	Ala	Arg	Gln	Gly	Ser	Leu	Thr	Lys	Gly	Leu	Ala	Pro	Arg	
	610					615					620					
Ser	Gly	Asp	Leu	Val	Tyr	Met	Glu	Asp	Ser	Pro	Ser	Phe	Cys	Arg	Pro	
625					630					635					640	
Ser	Lys	Tyr	Ser	Pro	Gly	Thr	Ala	Gly	Arg	Val	Cys	Ser	Arg	Glu	Ala	
				645					650					655		
Ser	Cys	Ser	Ser	Leu	Cys	Cys	Gly	Arg	Gly	Tyr	Asp	Thr	Gln	Ser	Arg	
			660					665					670			

Leu	Val	Ala	Phe	Ser	Cys	His	Cys	Gln	Val	Gln	Trp	Cys	Cys	Tyr	Val
		675					680					685			
Glu	Cys	Gln	Gln	Cys	Val	Gln	Glu	Glu	Leu	Val	Tyr	Thr	Cys	Lys	His
	690					695					700				

<210> 27
 <211> 361
 <212> PRT
 <213> Homo sapiens

<400> 27

Met	Lys	Pro	Leu	Arg	Arg	Pro	Leu	Pro	Phe	Ile	Cys	Pro	Ser	Pro	Pro
1				5					10					15	
Ser	Pro	Arg	Leu	Thr	Cys	Leu	Pro	Pro	Leu	Ala	Leu	Ser	Ser	Leu	Thr
			20					25					30		
Gly	Arg	Glu	Val	Leu	Thr	Pro	Phe	Pro	Gly	Leu	Gly	Thr	Ala	Ala	Ala
		35					40					45			
Pro	Ala	Gln	Gly	Gly	Ala	His	Leu	Lys	Gln	Cys	Asp	Leu	Leu	Lys	Leu
	50					55					60				
Ser	Arg	Arg	Gln	Lys	Gln	Leu	Cys	Arg	Arg	Glu	Pro	Gly	Leu	Ala	Glu
65					70					75					80
Thr	Leu	Arg	Asp	Ala	Ala	His	Leu	Gly	Leu	Leu	Glu	Cys	Gln	Phe	Gln
			85						90					95	
Phe	Arg	His	Glu	Arg	Trp	Asn	Cys	Ser	Leu	Glu	Gly	Arg	Met	Gly	Leu
			100					105					110		
Leu	Lys	Arg	Gly	Phe	Lys	Glu	Thr	Ala	Phe	Leu	Tyr	Ala	Val	Ser	Ser
		115					120					125			
Ala	Ala	Leu	Thr	His	Thr	Leu	Ala	Arg	Ala	Cys	Ser	Ala	Gly	Arg	Met
	130					135					140				
Glu	Arg	Cys	Thr	Cys	Asp	Asp	Ser	Pro	Gly	Leu	Glu	Ser	Arg	Gln	Ala
145					150					155					160
Trp	Gln	Trp	Gly	Val	Cys	Gly	Asp	Asn	Leu	Lys	Tyr	Ser	Thr	Lys	Phe
			165						170					175	
Leu	Ser	Asn	Phe	Leu	Gly	Ser	Lys	Arg	Gly	Asn	Lys	Asp	Leu	Arg	Ala
		180						185					190		
Arg	Ala	Asp	Ala	His	Asn	Thr	His	Val	Gly	Ile	Lys	Ala	Val	Lys	Ser
		195					200					205			
Gly	Leu	Arg	Thr	Thr	Cys	Lys	Cys	His	Gly	Val	Ser	Gly	Ser	Cys	Ala
	210					215						220			
Val	Arg	Thr	Cys	Trp	Lys	Gln	Leu	Ser	Pro	Phe	Arg	Glu	Thr	Gly	Gln
225					230					235					240
Val	Leu	Lys	Leu	Arg	Tyr	Asp	Ser	Ala	Val	Lys	Val	Ser	Ser	Ala	Thr
			245						250					255	
Asn	Glu	Ala	Leu	Gly	Arg	Leu	Glu	Leu	Trp	Ala	Pro	Ala	Arg	Gln	Gly
		260						265					270		
Ser	Leu	Thr	Lys	Gly	Leu	Ala	Pro	Arg	Ser	Gly	Asp	Leu	Val	Tyr	Met
		275					280					285			
Glu	Asp	Ser	Pro	Ser	Phe	Cys	Arg	Pro	Ser	Lys	Tyr	Ser	Pro	Gly	Thr
	290					295					300				
Ala	Gly	Arg	Val	Cys	Ser	Arg	Glu	Ala	Ser	Cys	Ser	Ser	Leu	Cys	Cys
305					310					315					320
Gly	Arg	Gly	Tyr	Asp	Thr	Gln	Ser	Arg	Leu	Val	Ala	Phe	Ser	Cys	His
			325						330					335	
Cys	Gln	Val	Gln	Trp	Cys	Cys	Tyr	Val	Glu	Cys	Gln	Gln	Cys	Val	Gln
			340					345					350		

Glu Glu Leu Val Tyr Thr Cys Lys His
 355 360

<210> 28
 <211> 365
 <212> PRT
 <213> Homo sapiens

<400> 28
 Met Trp Leu Leu Leu Thr Thr Thr Cys Leu Ile Cys Gly Thr Leu Asn
 1 5 10 15
 Ala Gly Gly Phe Leu Asp Leu Glu Asn Glu Val Asn Pro Glu Val Trp
 20 25 30
 Met Asn Thr Ser Glu Ile Ile Ile Tyr Asn Gly Tyr Pro Ser Glu Glu
 35 40 45
 Tyr Glu Val Thr Thr Glu Asp Gly Tyr Ile Leu Leu Val Asn Arg Ile
 50 55 60
 Pro Tyr Gly Arg Thr His Ala Arg Ser Thr Ala Asp Ala Gly Tyr Asp
 65 70 75 80
 Val Trp Met Gly Asn Ser Arg Gly Asn Thr Trp Ser Arg Arg His Lys
 85 90 95
 Thr Leu Ser Glu Thr Asp Glu Lys Phe Trp Ala Phe Ser Phe Asp Glu
 100 105 110
 Met Ala Lys Tyr Asp Leu Pro Gly Val Ile Asp Phe Ile Val Asn Lys
 115 120 125
 Thr Gly Gln Glu Lys Leu Tyr Phe Ile Gly His Ser Leu Gly Thr Thr
 130 135 140
 Ile Gly Phe Val Ala Phe Ser Thr Met Pro Glu Leu Ala Gln Arg Ile
 145 150 155 160
 Lys Met Asn Phe Ala Leu Gly Pro Thr Ile Ser Phe Lys Tyr Pro Thr
 165 170 175
 Gly Ile Phe Thr Arg Phe Phe Leu Leu Pro Asn Ser Ile Ile Lys Ala
 180 185 190
 Val Phe Gly Thr Lys Gly Phe Phe Leu Glu Asp Lys Lys Thr Lys Ile
 195 200 205
 Ala Ser Thr Lys Ile Cys Asn Asn Lys Ile Leu Trp Leu Ile Cys Ser
 210 215 220
 Glu Phe Met Ser Leu Trp Ala Gly Ser Asn Lys Lys Asn Met Asn Gln
 225 230 235 240
 Ser Arg Met Asp Val Tyr Met Ser His Ala Pro Thr Gly Ser Ser Val
 245 250 255
 His Asn Ile Leu His Ile Lys Gln Leu Tyr His Ser Asp Glu Phe Arg
 260 265 270
 Ala Tyr Asp Trp Gly Asn Asp Ala Asp Asn Met Lys His Tyr Asn Gln
 275 280 285
 Ser His Pro Pro Ile Tyr Asp Leu Thr Ala Met Lys Val Pro Thr Ala
 290 295 300
 Ile Trp Ala Gly Gly His Asp Val Leu Val Thr Pro Gln Asp Val Ala
 305 310 315 320
 Arg Ile Leu Pro Gln Ile Lys Ser Leu His Tyr Phe Lys Leu Leu Pro
 325 330 335
 Asp Trp Asn His Phe Asp Phe Val Trp Gly Leu Asp Ala Pro Gln Arg
 340 345 350
 Met Tyr Ser Glu Ile Ile Ala Leu Met Lys Ala Tyr Ser
 355 360 365

<210> 29
 <211> 397
 <212> PRT
 <213> Homo sapiens

<400> 29

Met	Trp	Gln	Leu	Leu	Ala	Ala	Ala	Cys	Trp	Met	Leu	Leu	Leu	Gly	Ser
1				5					10					15	
Met	Tyr	Gly	Tyr	Asp	Lys	Lys	Gly	Asn	Asn	Ala	Asn	Pro	Glu	Ala	Asn
			20					25					30		
Met	Asn	Ile	Ser	Gln	Ile	Ile	Ser	Tyr	Trp	Gly	Tyr	Pro	Tyr	Glu	Glu
		35					40					45			
Tyr	Asp	Val	Thr	Thr	Lys	Asp	Gly	Tyr	Ile	Leu	Gly	Ile	Tyr	Arg	Ile
	50					55					60				
Pro	His	Gly	Arg	Gly	Cys	Pro	Gly	Arg	Thr	Ala	Pro	Lys	Pro	Ala	Val
65					70					75					80
Tyr	Leu	Gln	His	Gly	Leu	Ile	Ala	Ser	Ala	Ser	Asn	Trp	Ile	Cys	Asn
				85					90					95	
Leu	Pro	Asn	Asn	Ser	Leu	Ala	Phe	Leu	Leu	Ala	Asp	Ser	Gly	Tyr	Asp
			100					105					110		
Val	Trp	Leu	Gly	Asn	Ser	Arg	Gly	Asn	Thr	Trp	Ser	Arg	Lys	His	Leu
		115					120					125			
Lys	Leu	Ser	Pro	Lys	Ser	Pro	Glu	Tyr	Trp	Ala	Phe	Ser	Leu	Asp	Glu
	130					135					140				
Met	Ala	Lys	Tyr	Asp	Leu	Pro	Ala	Thr	Ile	Asn	Phe	Ile	Ile	Glu	Lys
145					150					155					160
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Gly 65	Glu	Glu	Ala	Pro	Ala	Arg	Gly	Ser	Pro	Arg	Pro	Thr	Glu	Asp	Leu 80
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Ala	Thr	Glu	Arg	Cys	Arg	Ser	Ser	Ser	Tyr	Thr	Arg	Gln	Glu	Phe	Val	1635	1640	1645
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His	Glu	Arg	Gln	Pro	Gly	Thr	Glu	Met	Leu	Arg	Ala	Asp	Leu	Arg	His	1665	1670	1675
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 50 55 60
 Gly Glu Glu Ala Pro Ala Arg Gly Ser Pro Arg Pro Thr Glu Asp Leu
 65 70 75 80
 Tyr Cys Lys Leu Val Gly Gly Pro Val Ala Gly Gly Asp Pro Asn Gln
 85 90 95
 Thr Ile Arg Gly Gln Tyr Cys Asp Ile Cys Thr Ala Ala Asn Ser Asn
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 Lys Ala His Pro Ala Ser Asn Ala Ile Asp Gly Thr Glu Arg Trp Trp
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 Gln Ser Pro Pro Leu Ser Arg Gly Leu Glu Tyr Asn Glu Val Asn Val
 130 135 140
 Thr Leu Asp Leu Gly Gln Val Phe His Val Ala Tyr Val Leu Ile Lys
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 Asp Phe Gly Arg Thr Tyr Gln Pro Trp Gln Phe Phe Ala Ser Ser Lys
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Gly	Arg	Tyr	Ala	Phe	Leu	Leu	His	Gly	Tyr	Gln	Pro	Ala	His	Pro	Thr		
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Phe	Pro	Val	Glu	Val	Leu	Ile	Asn	Ala	Gly	Arg	Val	Trp	Gln	Gly	His		
		1315				1320						1325					
Ala	Asn	Ala	Ser	Phe	Cys	Pro	His	Gly	Tyr	Gly	Cys	Arg	Thr	Leu	Val		
1330						1335					1340						
Val	Cys	Glu	Gly	Gln	Ala	Leu	Leu	Asp	Val	Thr	His	Ser	Glu	Leu	Thr		
1345					1350				1355						1360		
Val	Thr	Val	Arg	Val	Pro	Lys	Gly	Arg	Trp	Leu	Trp	Leu	Asp	Tyr	Val		
				1365					1370					1375			
Leu	Val	Val	Pro	Glu	Asn	Val	Tyr	Ser	Phe	Gly	Tyr	Leu	Arg	Glu	Glu		
			1380					1385					1390				
Pro	Leu	Asp	Lys	Ser	Tyr	Asp	Phe	Ile	Ser	His	Cys	Ala	Ala	Gln	Gly		
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Tyr	His	Ile	Ser	Pro	Ser	Ser	Ser	Ser	Leu	Phe	Cys	Arg	Asn	Ala	Ala		
1410						1415					1420						
Ala	Ser	Leu	Ser	Leu	Phe	Tyr	Asn	Asn	Gly	Ala	Arg	Pro	Cys	Gly	Cys		
1425					1430					1435					1440		
His	Glu	Val	Gly	Ala	Thr	Gly	Pro	Thr	Cys	Glu	Pro	Phe	Gly	Gly	Gln		
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Cys	Pro	Cys	His	Ala	His	Val	Ile	Gly	Arg	Asp	Cys	Ser	Arg	Cys	Ala		
			1460					1465					1470				
Thr	Gly	Tyr	Trp	Gly	Phe	Pro	Asn	Cys	Arg	Pro	Cys	Asp	Cys	Gly	Ala		
		1475				1480						1485					
Arg	Leu	Cys	Asp	Glu	Leu	Thr	Gly	Gln	Cys	Ile	Cys	Pro	Pro	Arg	Thr		
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Ile	Pro	Pro	Asp	Cys	Leu	Leu	Cys	Gln	Pro	Gln	Thr	Phe	Gly	Cys	His		
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Pro	Leu	Val	Gly	Cys	Glu	Glu	Cys	Asn	Cys	Ser	Gly	Pro	Gly	Ile	Gln		
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Glu	Leu	Thr	Asp	Pro	Thr	Cys	Asp	Thr	Asp	Ser	Gly	Gln	Cys	Lys	Cys	
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Arg	Pro	Asn	Val	Thr	Gly	Arg	Arg	Cys	Asp	Thr	Cys	Ser	Pro	Gly	Phe	
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His	Gly	Tyr	Pro	Arg	Cys	Arg	Pro	Cys	Asp	Cys	His	Glu	Ala	Gly	Thr	
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Ala	Pro	Gly	Val	Cys	Asp	Pro	Leu	Thr	Gly	Gln	Cys	Tyr	Cys	Lys	Glu	
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Asn	Val	Gln	Gly	Pro	Lys	Cys	Asp	Gln	Cys	Ser	Leu	Gly	Thr	Phe	Ser	
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Leu	Asp	Ala	Ala	Asn	Pro	Lys	Gly	Cys	Thr	Arg	Cys	Phe	Cys	Phe	Gly	
			1620					1625				1630				
Ala	Thr	Glu	Arg	Cys	Arg	Ser	Ser	Ser	Tyr	Thr	Arg	Gln	Glu	Phe	Val	
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Asp	Met	Glu	Gly	Trp	Val	Leu	Leu	Ser	Thr	Asp	Arg	Gln	Val	Val	Pro	
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His	Glu	Arg	Gln	Pro	Gly	Thr	Glu	Met	Leu	Arg	Ala	Asp	Leu	Arg	His	
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Val	Pro	Glu	Ala	Val	Pro	Glu	Ala	Phe	Pro	Glu	Leu	Tyr	Trp	Gln	Ala	
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Thr	Phe	Leu	Glu	Pro	Ala	Tyr	Pro	Thr	Pro	Gly	His	Val	His	Arg	Gly	
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Gln	Leu	Gln	Leu	Val	Glu	Gly	Asn	Phe	Arg	His	Thr	Glu	Thr	Arg	Asn	
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Thr	Val	Ser	Arg	Glu	Glu	Leu	Met	Met	Val	Leu	Ala	Ser	Leu	Glu	Gln	
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Leu	Gln	Ile	Arg	Ala	Leu	Phe	Ser	Gln	Ile	Ser	Ser	Ala	Val	Phe	Leu	
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Arg	Arg	Val	Ala	Leu	Glu	Val	Ala	Ser	Pro	Ala	Gly	Gln	Gly	Ala	Leu	
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Ala	Ser	Asn	Val	Glu	Leu	Cys	Leu	Cys	Pro	Ala	Ser	Tyr	Arg	Gly	Asp	
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Ser	Cys	Gln	Glu	Cys	Ala	Pro	Gly	Phe	Tyr	Arg	Asp	Val	Lys	Gly	Leu	
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Phe	Leu	Gly	Arg	Cys	Val	Pro	Cys	Gln	Cys	His	Gly	His	Ser	Asp	Arg	
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Asp	Pro	Leu	Thr	Gly	Ala	Cys	Arg	Gly	Cys	Leu	Arg	His	Thr	Thr	Gly	
1985					1990					1995						2000
Pro	Arg	Cys	Glu	Ile	Cys	Ala	Pro	Gly	Phe	Tyr	Gly	Asn	Ala	Leu	Leu	
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Pro	Gly	Asn	Cys	Thr	Arg	Cys	Asp	Cys	Thr	Pro	Cys	Gly	Thr	Glu	Ala	
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Cys	Asp	Pro	His	Ser	Gly	His	Cys	Leu	Cys	Lys	Ala	Gly	Val	Thr	Gly	
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Arg	Arg	Cys	Asp	Arg	Cys	Gln	Glu	Gly	His	Phe	Gly	Phe	Asp	Gly	Cys	
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Gly	Gly	Cys	Arg	Pro	Cys	Ala	Cys	Gly	Pro	Ala	Ala	Glu	Gly	Ser	Glu	
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Cys	His	Pro	Gln	Ser	Gly	Gln	Cys	His	Cys	Arg	Pro	Gly	Thr	Met	Gly	
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Pro	Gln	Cys	Arg	Glu	Cys	Ala	Pro	Gly	Tyr	Trp	Gly	Leu	Pro	Glu	Gln	
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Gly	Cys	Arg	Arg	Cys	Gln	Cys	Pro	Gly	Gly	Arg	Cys	Asp	Pro	His	Thr	
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Gly	Arg	Cys	Asn	Cys	Pro	Pro	Gly	Leu	Ser	Gly	Glu	Arg	Cys	Asp	Thr	
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Cys	Ser	Gln	Gln	His	Gln	Val	Pro	Val	Pro	Gly	Gly	Pro	Val	Gly	His	
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Ser	Ile	His	Cys	Glu	Val	Cys	Asp	His	Cys	Val	Val	Leu	Leu	Leu	Asp	
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Asp	Leu	Glu	Arg	Ala	Gly	Ala	Leu	Leu	Pro	Ala	Ile	His	Glu	Gln	Leu	
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Arg	Gly	Ile	Asn	Ala	Ser	Ser	Met	Ala	Trp	Ala	Arg	Leu	His	Arg	Leu	
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Asn	Ala	Ser	Ile	Ala	Asp	Leu	Gln	Ser	Gln	Leu	Arg	Ser	Pro	Leu	Gly	
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Pro	Arg	His	Glu	Thr	Ala	Gln	Gln	Leu	Glu	Val	Leu	Glu	Gln	Gln	Ser	
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Thr	Ser	Leu	Gly	Gln	Asp	Ala	Arg	Arg	Leu	Gly	Gly	Gln	Ala	Ala	Val	
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Gly	Thr	Arg	Asp	Gln	Ala	Ser	Gln	Leu	Leu	Ala	Gly	Thr	Glu	Ala	Thr	
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Leu	Gly	His	Ala	Lys	Thr	Leu	Leu	Ala	Ala	Ile	Arg	Ala	Val	Asp	Arg	
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Ala	Ser	Ala	Pro	Ser	Gly	Glu	Gln	Leu	Leu	Arg	Thr	Leu	Ala	Glu	Val	
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Glu	Arg	Leu	Leu	Trp	Glu	Met	Arg	Ala	Arg	Asp	Leu	Gly	Ala	Pro	Gln	
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Ala	Ala	Ala	Glu	Ala	Glu	Leu	Ala	Ala	Ala	Gln	Arg	Leu	Leu	Ala	Arg	
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Val	Gln	Glu	Gln	Leu	Ser	Ser	Leu	Trp	Glu	Glu	Asn	Gln	Ala	Leu	Ala	
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Thr	Gln	Thr	Arg	Asp	Arg	Leu	Ala	Gln	His	Glu	Ala	Gly	Leu	Met	Asp	
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Leu	Arg	Glu	Ala	Leu	Asn	Arg	Ala	Val	Asp	Ala	Thr	Arg	Glu	Ala	Gln	
2385					2390					2395						2400
Glu	Leu	Asn	Ser	Arg	Asn	Gln	Glu	Arg	Leu	Glu	Glu	Ala	Leu	Gln	Arg	
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Lys	Gln	Glu	Leu	Ser	Arg	Asp	Asn	Ala	Thr	Leu	Gln	Ala	Thr	Leu	His	
				2420					2425							2430

Ala	Ala	Arg	Asp	Thr	Leu	Ala	Ser	Val	Phe	Arg	Leu	Leu	His	Ser	Leu		
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Asp	Gln	Ala	Lys	Glu	Glu	Leu	Glu	Arg	Leu	Ala	Ala	Ser	Leu	Asp	Gly		
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Ala	Arg	Thr	Pro	Leu	Leu	Gln	Arg	Met	Gln	Thr	Phe	Ser	Pro	Ala	Gly		
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Ser	Lys	Leu	Arg	Leu	Val	Glu	Ala	Ala	Glu	Ala	His	Ala	Gln	Gln	Leu		
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Gly	Gln	Leu	Ala	Leu	Asn	Leu	Ser	Ser	Ile	Ile	Leu	Asp	Val	Asn	Gln		
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Asp	Arg	Leu	Thr	Gln	Arg	Ala	Ile	Glu	Ala	Ser	Asn	Ala	Tyr	Ser	Arg		
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Ile	Leu	Gln	Ala	Val	Gln	Ala	Ala	Glu	Asp	Ala	Ala	Gly	Gln	Ala	Leu		
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Gln	Gln	Ala	Asp	His	Thr	Trp	Ala	Thr	Val	Val	Arg	Gln	Gly	Leu	Val		
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Met	Leu	Gln	Glu	Gln	Gln	Arg	Leu	Gly	Leu	Val	Trp	Ala	Ala	Leu	Gln		
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Gly	Ala	Arg	Thr	Gln	Leu	Arg	Asp	Val	Arg	Ala	Lys	Lys	Asp	Gln	Leu		
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Gln	Asp	Thr	Ala	Thr	Arg	Val	Gln	Ser	Gln	Leu	Gln	Ala	Met	Gln	Glu		
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Asn	Val	Glu	Arg	Trp	Gln	Gly	Gln	Tyr	Glu	Gly	Leu	Arg	Gly	Gln	Asp		
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Leu	Gly	Gln	Ala	Val	Leu	Asp	Ala	Gly	His	Ser	Val	Ser	Thr	Leu	Glu		
		2675						2680					2685				
Lys	Thr	Leu	Pro	Gln	Leu	Leu	Ala	Lys	Leu	Ser	Ile	Leu	Glu	Asn	Arg		
		2690						2695					2700				
Gly	Val	His	Asn	Ala	Ser	Leu	Ala	Leu	Ser	Ala	Ser	Ile	Gly	Arg	Val		
2705					2710					2715					2720		
Arg	Glu	Leu	Ile	Ala	Gln	Ala	Arg	Gly	Ala	Ala	Ser	Lys	Val	Lys	Val		
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Pro	Met	Lys	Phe	Asn	Gly	Arg	Ser	Gly	Val	Gln	Leu	Arg	Thr	Pro	Arg		
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Asp	Leu	Ala	Asp	Leu	Ala	Ala	Tyr	Thr	Ala	Leu	Lys	Phe	Tyr	Leu	Gln		
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Gly	Pro	Glu	Pro	Glu	Pro	Gly	Gln	Gly	Thr	Glu	Asp	Arg	Phe	Val	Met		
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Tyr	Met	Gly	Ser	Arg	Gln	Ala	Thr	Gly	Asp	Tyr	Met	Gly	Val	Ser	Leu		
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Arg	Asp	Lys	Lys	Val	His	Trp	Val	Tyr	Gln	Leu	Gly	Glu	Ala	Gly	Pro		
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Ala	Val	Leu	Ser	Ile	Asp	Glu	Asp	Ile	Gly	Glu	Gln	Phe	Ala	Ala	Val		
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Ser	Leu	Asp	Arg	Thr	Leu	Gln	Phe	Gly	His	Met	Ser	Val	Thr	Val	Glu		
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Arg	Gln	Met	Ile	Gln	Glu	Thr	Lys	Gly	Asp	Thr	Val	Ala	Pro	Gly	Ala		
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Glu	Gly	Leu	Leu	Asn	Leu	Arg	Pro	Asp	Asp	Phe	Val	Phe	Tyr	Val	Gly		
2865					2870					2875					2880		

Gly Tyr Pro Ser Thr Phe Thr Pro Pro Pro Leu Leu Arg Phe Pro Gly	2885	2890	2895
Tyr Arg Gly Cys Ile Glu Met Asp Thr Leu Asn Glu Glu Val Val Ser	2900	2905	2910
Leu Tyr Asn Phe Glu Arg Thr Phe Gln Leu Asp Thr Ala Val Asp Arg	2915	2920	2925
Pro Cys Ala Arg Ser Lys Ser Thr Gly Asp Pro Trp Leu Thr Asp Gly	2930	2935	2940
Ser Tyr Leu Asp Gly Thr Gly Phe Ala Arg Ile Ser Phe Asp Ser Gln	2945	2950	2955
Ile Ser Thr Thr Lys Arg Phe Glu Gln Glu Leu Arg Leu Val Ser Tyr	2965	2970	2975
Ser Gly Val Leu Phe Phe Leu Lys Gln Gln Ser Gln Phe Leu Cys Leu	2980	2985	2990
Ala Val Gln Glu Gly Ser Leu Val Leu Leu Tyr Asp Phe Gly Ala Gly	2995	3000	3005
Leu Lys Lys Ala Val Pro Leu Gln Pro Pro Pro Pro Leu Thr Ser Ala	3010	3015	3020
Ser Lys Ala Ile Gln Val Phe Leu Leu Gly Gly Ser Arg Lys Arg Val	3025	3030	3035
Leu Val Arg Val Glu Arg Ala Thr Val Tyr Ser Val Glu Gln Asp Asn	3045	3050	3055
Asp Leu Glu Leu Ala Asp Ala Tyr Tyr Leu Gly Gly Val Pro Pro Asp	3060	3065	3070
Gln Leu Pro Pro Ser Leu Arg Arg Leu Phe Pro Thr Gly Gly Ser Val	3075	3080	3085
Arg Gly Cys Val Lys Gly Ile Lys Ala Leu Gly Lys Tyr Val Asp Leu	3090	3095	3100
Lys Arg Leu Asn Thr Thr Gly Val Ser Ala Gly Cys Thr Ala Asp Leu	3105	3110	3115
Leu Val Gly Arg Ala Met Thr Phe His Gly His Gly Phe Leu Arg Leu	3125	3130	3135
Ala Leu Ser Asn Val Ala Pro Leu Thr Gly Asn Val Tyr Ser Gly Phe	3140	3145	3150
Gly Phe His Ser Ala Gln Asp Ser Ala Leu Leu Tyr Tyr Arg Ala Ser	3155	3160	3165
Pro Asp Gly Leu Cys Gln Val Ser Leu Gln Gln Gly Arg Val Ser Leu	3170	3175	3180
Gln Leu Leu Arg Thr Glu Val Lys Thr Gln Ala Gly Phe Ala Asp Gly	3185	3190	3195
Ala Pro His Tyr Val Ala Phe Tyr Ser Asn Ala Thr Gly Val Trp Leu	3205	3210	3215
Tyr Val Asp Asp Gln Leu Gln Gln Met Lys Pro His Arg Gly Pro Pro	3220	3225	3230
Pro Glu Leu Gln Pro Gln Pro Glu Gly Pro Pro Arg Leu Leu Leu Gly	3235	3240	3245
Gly Leu Pro Glu Ser Gly Thr Ile Tyr Asn Phe Ser Gly Cys Ile Ser	3250	3255	3260
Asn Val Phe Val Gln Arg Leu Leu Gly Pro Gln Arg Val Phe Asp Leu	3265	3270	3275
Gln Gln Asn Leu Gly Ser Val Asn Val Ser Thr Gly Cys Ala Pro Ala	3285	3290	3295
Leu Gln Ala Gln Thr Pro Gly Leu Gly Pro Arg Gly Leu Gln Ala Thr	3300	3305	3310
Ala Arg Lys Ala Ser Arg Arg Ser Arg Gln Pro Ala Arg His Pro Ala	3315	3320	3325

Cys Met Leu Pro Pro His Leu Arg Thr Thr Arg Asp Ser Tyr Gln Phe
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Gly Gly Ser Leu Ser Ser His Leu Glu Phe Val Gly Ile Leu Ala Arg
3345 3350 3355 3360
His Arg Asn Trp Pro Ser Leu Ser Met His Val Leu Pro Arg Ser Ser
3365 3370 3375
Arg Gly Leu Leu Leu Phe Thr Ala Arg Leu Arg Pro Gly Ser Pro Ser
3380 3385 3390
Leu Ala Leu Phe Leu Ser Asn Gly His Phe Val Ala Gln Met Glu Gly
3395 3400 3405
Leu Gly Thr Arg Leu Arg Ala Gln Ser Arg Gln Arg Ser Arg Pro Gly
3410 3415 3420
Arg Trp His Lys Val Ser Val Arg Trp Glu Lys Asn Arg Ile Leu Leu
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Val Thr Asp Gly Ala Arg Ala Trp Ser Gln Glu Gly Pro His Arg Gln
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His Gln Gly Ala Glu His Pro Gln Pro His Thr Leu Phe Val Gly Gly
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Leu Pro Ala Ser Ser His Ser Ser Lys Leu Pro Val Thr Val Gly Phe
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Ser Gly Cys Val Lys Arg Leu Arg Leu His Gly Arg Pro Leu Gly Ala
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Pro Thr Arg Met Ala Gly Val Thr Pro Cys Ile Leu Gly Pro Leu Glu
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Ala Gly Leu Phe Phe Pro Gly Ser Gly Gly Val Ile Thr Leu Asp Leu
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Pro Gly Ala Thr Leu Pro Asp Val Gly Leu Glu Leu Glu Val Arg Pro
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Leu Ala Val Thr Gly Leu Ile Phe His Leu Gly Gln Ala Arg Thr Pro
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Pro Tyr Leu Gln Leu Gln Val Thr Glu Lys Gln Val Leu Leu Arg Ala
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Asp Asp Gly Ala Gly Glu Phe Ser Thr Ser Val Thr Arg Pro Ser Val
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Leu Cys Asp Gly Gln Trp His Arg Leu Ala Val Met Lys Ser Gly Asn
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Val Leu Arg Leu Glu Val Asp Ala Gln Ser Asn His Thr Val Gly Pro
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Leu Leu Ala Ala Ala Ala Gly Ala Pro Ala Pro Leu Tyr Leu Gly Gly
3635 3640 3645
Leu Pro Glu Pro Met Ala Val Gln Pro Trp Pro Pro Ala Tyr Cys Gly
3650 3655 3660
Cys Met Arg Arg Leu Ala Val Asn Arg Ser Pro Val Ala Met Thr Arg
3665 3670 3675 3680
Ser Val Glu Val His Gly Ala Val Gly Ala Ser Gly Cys Pro Ala Ala
3685 3690 3695

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<400> 32
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 Leu Gly Ile Thr Thr Thr Asn Gly Glu Asp Val Ala Val Lys Leu Glu
 35 40 45
 Ser Gln Lys Val Lys His Pro Gln Leu Leu Tyr Glu Ser Lys Leu Tyr
 50 55 60
 Thr Ile Leu Gln Gly Gly Val Gly Ile Pro His Met His Trp Tyr Gly
 65 70 75 80
 Gln Glu Lys Asp Asn Asn Val Leu Val Met Asp Leu Leu Gly Pro Ser
 85 90 95
 Leu Glu Asp Leu Phe Asn Phe Cys Ser Arg Arg Phe Thr Met Lys Thr
 100 105 110
 Val Leu Met Leu Ala Asp Gln Met Ile Ser Arg Ile Glu Tyr Val His
 115 120 125
 Thr Lys Asn Phe Leu His Arg Asp Ile Lys Pro Asp Asn Phe Leu Met
 130 135 140
 Gly Thr Gly Arg His Cys Asn Lys Leu Phe Leu Ile Asp Phe Gly Leu
 145 150 155 160
 Ala Lys Lys Tyr Arg Asp Asn Arg Thr Arg Gln His Ile Pro Tyr Arg
 165 170 175
 Glu Asp Lys His Leu Ile Gly Thr Val Arg Tyr Ala Ser Ile Asn Ala
 180 185 190
 His Leu Gly Ile Glu Gln Ser Arg Arg Asp Asp Met Glu Ser Leu Gly
 195 200 205
 Tyr Val Phe Met Tyr Phe Asn Arg Thr Ser Leu Pro Trp Gln Gly Leu
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 Arg Ala Met Thr Lys Lys Gln Lys Tyr Glu Lys Ile Ser Glu Lys Lys
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 Met Ser Thr Pro Val Glu Val Leu Cys Lys Gly Phe Pro Ala Glu Phe
 245 250 255
 Ala Met Tyr Leu Asn Tyr Cys Arg Gly Leu Arg Phe Glu Glu Val Pro
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 Asp Tyr Met Tyr Leu Arg Gln Leu Phe Arg Ile Leu Phe Arg Thr Leu
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 Asn His Gln Tyr Asp Tyr Thr Phe Asp Trp Thr Met Leu Lys Gln Lys
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 Thr Gln Ala Ala Ala Leu Ile Asn Leu Lys Tyr Ser Val Glu Glu Glu
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 Gln Arg Ala Gly Thr Val Ile Ala Asn Val Ala Lys Asp Ala Arg Glu
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Ser	Asn	Ser	Ala	Pro	His	Leu	Val	Asp	Ile	Asn	Pro	Ser	Ser	Gly	Leu
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Leu	Val	Thr	Lys	Gln	Lys	Ile	Asp	Arg	Asp	Leu	Leu	Cys	Arg	Gln	Ser
				85					90					95	
Pro	Lys	Cys	Ile	Ile	Ser	Leu	Glu	Val	Met	Ser	Ser	Ser	Met	Glu	Ile
			100					105					110		
Cys	Val	Ile	Lys	Val	Glu	Ile	Lys	Asp	Leu	Asn	Asp	Asn	Ala	Pro	Ser
		115					120					125			
Phe	Pro	Ala	Ala	Gln	Ile	Glu	Leu	Glu	Ile	Ser	Glu	Ala	Ala	Ser	Pro
	130					135					140				
Gly	Thr	Arg	Ile	Pro	Leu	Asp	Ser	Ala	Tyr	Asp	Pro	Asp	Ser	Gly	Ser
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Phe	Gly	Val	Gln	Thr	Tyr	Glu	Leu	Thr	Pro	Asn	Glu	Leu	Phe	Gly	Leu
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Glu	Ile	Lys	Thr	Arg	Gly	Asp	Gly	Ser	Arg	Phe	Ala	Glu	Leu	Val	Val
			180					185					190		
Glu	Lys	Ser	Leu	Asp	Arg	Glu	Thr	Gln	Ser	His	Tyr	Ser	Phe	Arg	Ile
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Thr	Ala	Leu	Asp	Gly	Gly	Asp	Pro	Pro	Arg	Leu	Gly	Thr	Val	Gly	Leu
	210					215					220				
Ser	Ile	Lys	Val	Thr	Asp	Ser	Asn	Asp	Asn	Asn	Pro	Val	Phe	Ser	Glu
225					230					235					240
Ser	Thr	Tyr	Ala	Val	Ser	Val	Pro	Glu	Asn	Ser	Pro	Pro	Asn	Thr	Pro
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Val	Ile	Arg	Leu	Asn	Ala	Ser	Asp	Pro	Asp	Glu	Gly	Thr	Asn	Gly	Gln
			260					265					270		
Val	Val	Tyr	Ser	Phe	Tyr	Gly	Tyr	Val	Asn	Asp	Arg	Thr	Arg	Glu	Leu
		275					280					285			
Phe	Gln	Ile	Asp	Pro	His	Ser	Gly	Leu	Val	Thr	Val	Thr	Gly	Ala	Leu
	290					295				300					
Asp	Tyr	Glu	Glu	Gly	His	Val	Tyr	Glu	Leu	Asp	Val	Gln	Ala	Lys	Asp
305					310					315					320
Leu	Gly	Pro	Asn	Ser	Ile	Pro	Ala	His	Cys	Lys	Val	Thr	Val	Ser	Val
				325					330					335	
Leu	Asp	Thr	Asn	Asp	Asn	Pro	Pro	Val	Ile	Asn	Leu	Leu	Ser	Val	Asn
			340					345					350		
Ser	Glu	Leu	Val	Glu	Val	Ser	Glu	Ser	Ala	Pro	Pro	Gly	Tyr	Val	Ile
		355					360					365			
Ala	Leu	Val	Arg	Val	Ser	Asp	Arg	Asp	Ser	Gly	Leu	Asn	Gly	Arg	Val
	370					375					380				
Gln	Cys	Arg	Leu	Leu	Gly	Asn	Val	Pro	Phe	Arg	Leu	Gln	Glu	Tyr	Glu
385					390					395					400
Ser	Phe	Ser	Thr	Ile	Leu	Val	Asp	Gly	Arg	Leu	Asp	Arg	Glu	Gln	His
				405					410					415	
Asp	Gln	Tyr	Asn	Leu	Thr	Ile	Gln	Ala	Arg	Asp	Gly	Gly	Val	Pro	Met
			420					425					430		
Leu	Gln	Ser	Ala	Lys	Ser	Phe	Thr	Val	Leu	Ile	Thr	Asp	Glu	Asn	Asp
		435					440					445			
Asn	His	Pro	His	Phe	Ser	Lys	Pro	Tyr	Tyr	Gln	Val	Ile	Val	Gln	Glu
	450					455					460				
Asn	Asn	Thr	Pro	Gly	Ala	Tyr	Leu	Leu	Ser	Val	Ser	Ala	Arg	Asp	Pro
465					470					475					480
Asp	Leu	Gly	Leu	Asn	Gly	Ser	Val	Ser	Tyr	Gln	Ile	Val	Pro	Ser	Gln
				485					490					495	

Val	Arg	Asp	Met	Pro	Val	Phe	Thr	Tyr	Val	Ser	Ile	Asn	Pro	Asn	Ser		
			500					505					510				
Gly	Asp	Ile	Tyr	Ala	Leu	Arg	Ser	Phe	Asn	His	Glu	Gln	Thr	Lys	Ala		
		515					520					525					
Phe	Glu	Phe	Lys	Val	Leu	Ala	Lys	Asp	Gly	Gly	Leu	Pro	Ser	Leu	Gln		
	530					535					540						
Ser	Asn	Ala	Thr	Val	Arg	Val	Ile	Ile	Leu	Asp	Val	Asn	Asp	Asn	Thr		
545					550					555					560		
Pro	Val	Ile	Thr	Ala	Pro	Pro	Leu	Ile	Asn	Gly	Thr	Ala	Glu	Val	Tyr		
				565						570					575		
Ile	Pro	Arg	Asn	Ser	Gly	Ile	Gly	Tyr	Leu	Val	Thr	Val	Val	Lys	Ala		
			580					585						590			
Glu	Asp	Tyr	Asp	Glu	Gly	Glu	Asn	Gly	Arg	Val	Thr	Tyr	Asp	Met	Thr		
		595					600						605				
Glu	Gly	Asp	Arg	Gly	Phe	Phe	Glu	Ile	Asp	Gln	Val	Asn	Gly	Glu	Val		
	610					615					620						
Arg	Thr	Thr	Arg	Thr	Phe	Gly	Glu	Ser	Ser	Lys	Ser	Ser	Tyr	Glu	Leu		
625					630					635					640		
Ile	Val	Val	Ala	His	Asp	His	Gly	Lys	Thr	Ser	Leu	Ser	Ala	Ser	Ala		
				645						650					655		
Leu	Val	Leu	Ile	Tyr	Leu	Ser	Pro	Ala	Leu	Asp	Ala	Gln	Glu	Ser	Met		
			660					665					670				
Gly	Ser	Val	Asn	Leu	Ser	Leu	Ile	Phe	Ile	Ile	Ala	Leu	Gly	Ser	Ile		
		675					680					685					
Ala	Gly	Ile	Leu	Phe	Val	Thr	Met	Ile	Phe	Val	Ala	Ile	Lys	Cys	Lys		
	690					695					700						
Arg	Asp	Asn	Lys	Glu	Ile	Arg	Thr	Tyr	Asn	Cys	Ser	Asn	Cys	Leu	Thr		
705					710					715					720		
Ile	Thr	Cys	Leu	Leu	Gly	Cys	Phe	Ile	Lys	Gly	Gln	Asn	Ser	Lys	Cys		
				725						730					735		
Leu	His	Cys	Ile	Ser	Val	Ser	Pro	Ile	Ser	Glu	Glu	Gln	Asp	Lys	Lys		
			740					745					750				
Thr	Glu	Glu	Lys	Val	Ser	Leu	Arg	Gly	Lys	Arg	Ile	Ala	Glu	Tyr	Ser		
		755					760					765					
Tyr	Gly	His	Gln	Lys	Lys	Ser	Ser	Lys	Lys	Lys	Lys	Ile	Ser	Lys	Asn		
	770					775						780					
Asp	Ile	Arg	Leu	Val	Pro	Arg	Asp	Val	Glu	Glu	Thr	Asp	Lys	Met	Asn		
785					790					795					800		
Val	Val	Ser	Cys	Ser	Ser	Leu	Thr	Ser	Ser	Leu	Asn	Tyr	Phe	Asp	Tyr		
				805						810					815		
His	Gln	Gln	Thr	Leu	Pro	Leu	Gly	Cys	Arg	Arg	Ser	Glu	Ser	Thr	Phe		
			820					825						830			
Leu	Asn	Val	Glu	Asn	Gln	Asn	Thr	Arg	Asn	Thr	Ser	Ala	Asn	His	Ile		
		835					840					845					
Tyr	His	His	Ser	Phe	Asn	Ser	Gln	Gly	Pro	Gln	Gln	Pro	Asp	Leu	Ile		
	850					855					860						
Ile	Asn	Gly	Val	Pro	Leu	Pro	Glu	Val	Ser	Ala	Ala	Lys	Trp	Leu	Cys		
865					870					875					880		
Glu	Val	Leu	Pro	Gly	Leu	Leu	Leu										
				885													

<210> 34

<211> 855

<212> PRT

<213> Homo sapiens

<400> 34

Met	Glu	Ser	Leu	Leu	Leu	Pro	Val	Leu	Leu	Leu	Leu	Ala	Ile	Leu	Trp
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Thr	Gln	Ala	Ala	Ala	Leu	Ile	Asn	Leu	Lys	Tyr	Ser	Val	Glu	Glu	Glu
		20						25				30			
Gln	Arg	Ala	Gly	Thr	Val	Ile	Ala	Asn	Val	Ala	Lys	Asp	Ala	Arg	Glu
		35					40				45				
Ala	Gly	Phe	Ala	Leu	Asp	Pro	Arg	Gln	Ala	Ser	Ala	Phe	Arg	Val	Val
	50				55					60					
Ser	Asn	Ser	Ala	Pro	His	Leu	Val	Asp	Ile	Asn	Pro	Ser	Ser	Gly	Leu
65					70					75					80
Leu	Val	Thr	Lys	Gln	Lys	Ile	Asp	Arg	Asp	Leu	Leu	Cys	Arg	Gln	Ser
			85						90					95	
Pro	Lys	Cys	Ile	Ile	Ser	Leu	Glu	Val	Met	Ser	Ser	Ser	Met	Glu	Ile
			100					105					110		
Cys	Val	Ile	Lys	Val	Glu	Ile	Lys	Asp	Leu	Asn	Asp	Asn	Ala	Pro	Ser
		115					120					125			
Phe	Pro	Ala	Ala	Gln	Ile	Glu	Leu	Glu	Ile	Ser	Glu	Ala	Ala	Ser	Pro
	130					135					140				
Gly	Thr	Arg	Ile	Pro	Leu	Asp	Ser	Ala	Tyr	Asp	Pro	Asp	Ser	Gly	Ser
145					150					155					160
Phe	Gly	Val	Gln	Thr	Tyr	Glu	Leu	Thr	Pro	Asn	Glu	Leu	Phe	Gly	Leu
			165					170						175	
Glu	Ile	Lys	Thr	Arg	Gly	Asp	Gly	Ser	Arg	Phe	Ala	Glu	Leu	Val	Val
			180					185				190			
Glu	Lys	Ser	Leu	Asp	Arg	Glu	Thr	Gln	Ser	His	Tyr	Ser	Phe	Arg	Ile
		195					200					205			
Thr	Ala	Leu	Asp	Gly	Gly	Asp	Pro	Pro	Arg	Leu	Gly	Thr	Val	Gly	Leu
	210					215					220				
Ser	Ile	Lys	Val	Thr	Asp	Ser	Asn	Asp	Asn	Asn	Pro	Val	Phe	Ser	Glu
225					230					235					240
Ser	Thr	Tyr	Ala	Val	Ser	Val	Pro	Glu	Asn	Ser	Pro	Pro	Asn	Thr	Pro
			245						250					255	
Val	Ile	Arg	Leu	Asn	Ala	Ser	Asp	Pro	Asp	Glu	Gly	Thr	Asn	Gly	Gln
		260						265					270		
Val	Val	Tyr	Ser	Phe	Tyr	Gly	Tyr	Val	Asn	Asp	Arg	Thr	Arg	Glu	Leu
		275					280					285			
Phe	Gln	Ile	Asp	Pro	His	Ser	Gly	Leu	Val	Thr	Val	Thr	Gly	Ala	Leu
	290					295					300				
Asp	Tyr	Glu	Glu	Gly	His	Val	Tyr	Glu	Leu	Asp	Val	Gln	Ala	Lys	Asp
305					310					315					320
Leu	Gly	Pro	Asn	Ser	Ile	Pro	Ala	His	Cys	Lys	Val	Thr	Val	Ser	Val
			325						330					335	
Leu	Asp	Thr	Asn	Asp	Asn	Pro	Pro	Val	Ile	Asn	Leu	Leu	Ser	Val	Asn
			340					345					350		
Ser	Glu	Leu	Val	Glu	Val	Ser	Glu	Ser	Ala	Pro	Pro	Gly	Tyr	Val	Ile
		355					360					365			
Ala	Leu	Val	Arg	Val	Ser	Asp	Arg	Asp	Ser	Gly	Leu	Asn	Gly	Arg	Val
	370					375					380				
Gln	Cys	Arg	Leu	Leu	Gly	Asn	Val	Pro	Phe	Arg	Leu	Gln	Glu	Tyr	Glu
385					390					395					400
Ser	Phe	Ser	Thr	Ile	Leu	Val	Asp	Gly	Arg	Leu	Asp	Arg	Glu	Gln	His
			405						410					415	
Asp	Gln	Tyr	Asn	Leu	Thr	Ile	Gln	Ala	Arg	Asp	Gly	Gly	Val	Pro	Met
			420					425					430		
Leu	Gln	Ser	Ala	Lys	Ser	Phe	Thr	Val	Leu	Ile	Thr	Asp	Glu	Asn	Asp
		435					440					445			

Asn	His	Pro	His	Phe	Ser	Lys	Pro	Tyr	Tyr	Gln	Val	Ile	Val	Gln	Glu
450						455					460				
Asn	Asn	Thr	Pro	Gly	Ala	Tyr	Leu	Leu	Ser	Val	Ser	Ala	Arg	Asp	Pro
465					470					475					480
Asp	Leu	Gly	Leu	Asn	Gly	Ser	Val	Ser	Tyr	Gln	Ile	Val	Pro	Ser	Gln
				485					490					495	
Val	Arg	Asp	Met	Pro	Val	Phe	Thr	Tyr	Val	Ser	Ile	Asn	Pro	Asn	Ser
			500					505					510		
Gly	Asp	Ile	Tyr	Ala	Leu	Arg	Ser	Phe	Asn	His	Glu	Gln	Thr	Lys	Ala
		515					520					525			
Phe	Glu	Phe	Lys	Val	Leu	Ala	Lys	Asp	Gly	Gly	Leu	Pro	Ser	Leu	Gln
	530					535					540				
Ser	Asn	Ala	Thr	Val	Arg	Val	Ile	Ile	Leu	Asp	Val	Asn	Asp	Asn	Thr
545					550					555					560
Pro	Val	Ile	Thr	Ala	Pro	Pro	Leu	Ile	Asn	Gly	Thr	Ala	Glu	Val	Tyr
			565						570					575	
Ile	Pro	Arg	Asn	Ser	Gly	Ile	Gly	Tyr	Leu	Val	Thr	Val	Val	Lys	Ala
			580					585					590		
Glu	Asp	Tyr	Asp	Glu	Gly	Glu	Asn	Gly	Arg	Val	Thr	Tyr	Asp	Met	Thr
	595						600					605			
Glu	Gly	Asp	Arg	Gly	Phe	Phe	Glu	Ile	Asp	Gln	Val	Asn	Gly	Glu	Val
	610					615					620				
Arg	Thr	Thr	Arg	Thr	Phe	Gly	Glu	Ser	Ser	Lys	Ser	Ser	Tyr	Glu	Leu
625					630					635					640
Ile	Val	Val	Ala	His	Asp	His	Gly	Lys	Thr	Ser	Leu	Ser	Ala	Ser	Ala
			645						650					655	
Leu	Val	Leu	Ile	Tyr	Leu	Ser	Pro	Ala	Leu	Asp	Ala	Gln	Glu	Ser	Met
		660						665					670		
Gly	Ser	Val	Asn	Leu	Ser	Leu	Ile	Phe	Ile	Ile	Ala	Leu	Gly	Ser	Ile
	675						680					685			
Ala	Gly	Ile	Leu	Phe	Val	Thr	Met	Ile	Phe	Val	Ala	Ile	Lys	Cys	Lys
	690					695					700				
Arg	Asp	Asn	Lys	Glu	Ile	Arg	Thr	Tyr	Asn	Cys	Arg	Ile	Ala	Glu	Tyr
705					710					715					720
Ser	Tyr	Gly	His	Gln	Lys	Lys	Ser	Ser	Lys	Lys	Lys	Lys	Ile	Ser	Lys
			725						730					735	
Asn	Asp	Ile	Arg	Leu	Val	Pro	Arg	Asp	Val	Glu	Glu	Thr	Asp	Lys	Met
			740					745					750		
Asn	Val	Val	Ser	Cys	Ser	Ser	Leu	Thr	Ser	Ser	Leu	Asn	Tyr	Phe	Asp
	755						760					765			
Tyr	His	Gln	Gln	Thr	Leu	Pro	Leu	Gly	Cys	Arg	Arg	Ser	Glu	Ser	Thr
	770					775					780				
Phe	Leu	Asn	Val	Glu	Asn	Gln	Asn	Thr	Arg	Asn	Thr	Ser	Ala	Asn	His
785					790					795					800
Ile	Tyr	His	His	Ser	Phe	Asn	Ser	Gln	Gly	Pro	Gln	Gln	Pro	Asp	Leu
			805						810					815	
Ile	Ile	Asn	Gly	Val	Pro	Leu	Pro	Glu	Thr	Glu	Asn	Tyr	Ser	Phe	Asp
		820						825					830		
Ser	Asn	Tyr	Val	Asn	Ser	Arg	Ala	His	Leu	Ile	Lys	Arg	Tyr	Val	Gly
	835						840					845			
Leu	Leu	Ala	Tyr	Cys	Cys	Asn									
850						855									

<210> 35
 <211> 329
 <212> PRT

<213> Homo sapiens

<400> 35

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Met Val Thr Lys Ala Phe Val Leu Leu Ala Ile Phe Ala Glu Ala Ser
 1          5          10          15
Ala Lys Ser Cys Ala Pro Asn Lys Ala Asp Val Ile Leu Val Phe Cys
 20          25          30
Tyr Pro Lys Thr Ile Ile Thr Lys Ile Pro Glu Cys Pro Tyr Gly Trp
 35          40          45
Glu Val His Gln Leu Ala Leu Gly Gly Leu Cys Tyr Asn Gly Val His
 50          55          60
Glu Gly Gly Tyr Tyr Gln Phe Val Ile Pro Asp Leu Ser Pro Lys Asn
 65          70          75          80
Lys Ser Tyr Cys Gly Thr Gln Ser Glu Tyr Lys Pro Pro Ile Tyr His
 85          90          95
Phe Tyr Ser His Ile Val Ser Asn Asp Thr Thr Val Ile Val Lys Asn
100          105          110
Gln Pro Val Asn Tyr Ser Phe Ser Cys Thr Tyr His Ser Thr Tyr Leu
115          120          125
Val Asn Gln Ala Ala Phe Asp Gln Arg Val Ala Thr Val His Val Lys
130          135          140
Asn Gly Ser Met Gly Thr Phe Glu Ser Gln Leu Ser Leu Asn Phe Tyr
145          150          155          160
Thr Asn Ala Lys Phe Ser Ile Lys Lys Glu Ala Pro Phe Val Leu Glu
165          170          175
Ala Ser Glu Ile Gly Ser Asp Leu Phe Ala Gly Val Glu Ala Lys Gly
180          185          190
Leu Ser Ile Arg Phe Lys Val Val Leu Asn Ser Cys Trp Ala Thr Pro
195          200          205
Ser Ala Asp Phe Met Tyr Pro Leu Gln Trp Gln Leu Ile Asn Lys Gly
210          215          220
Cys Pro Thr Asp Glu Thr Val Leu Val His Glu Asn Gly Arg Asp His
225          230          235          240
Arg Ala Thr Phe Gln Phe Asn Ala Phe Arg Phe Gln Asn Ile Pro Lys
245          250          255
Leu Ser Lys Val Trp Leu His Cys Glu Thr Phe Ile Cys Asp Ser Glu
260          265          270
Lys Leu Ser Cys Pro Val Thr Cys Asp Lys Arg Lys Arg Leu Leu Arg
275          280          285
Asp Gln Thr Gly Gly Val Leu Val Val Glu Leu Ser Leu Arg Ser Arg
290          295          300
Gly Phe Ser Ser Leu Tyr Ser Phe Ser Asp Val Leu His His Leu Ile
305          310          315          320
Met Met Leu Gly Ile Cys Ala Val Leu
325
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<210> 36

<211> 232

<212> PRT

<213> Homo sapiens

<400> 36

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Met Leu Tyr Thr Arg Lys Asn Leu Thr Cys Ala Gln Thr Ile Asn Ser
 1          5          10          15
Ser Ala Phe Gly Asn Leu Asn Val Thr Lys Lys Thr Thr Phe Ile Val
 20          25          30
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His	Gly	Phe	Arg	Pro	Thr	Gly	Ser	Pro	Pro	Val	Trp	Met	Asp	Asp	Leu
		35					40					45			
Val	Lys	Gly	Leu	Leu	Ser	Val	Glu	Asp	Met	Asn	Val	Val	Val	Val	Asp
	50					55					60				
Trp	Asn	Arg	Gly	Ala	Thr	Thr	Leu	Ile	Tyr	Thr	His	Ala	Ser	Ser	Lys
65					70					75					80
Thr	Arg	Lys	Val	Ala	Met	Val	Leu	Lys	Glu	Phe	Ile	Asp	Gln	Met	Leu
				85					90					95	
Ala	Glu	Gly	Ala	Ser	Leu	Asp	Asp	Ile	Tyr	Met	Ile	Gly	Val	Ser	Leu
			100					105					110		
Gly	Ala	His	Ile	Ser	Gly	Phe	Val	Gly	Glu	Met	Tyr	Asp	Gly	Trp	Leu
		115					120					125			
Gly	Arg	Ile	Thr	Gly	Leu	Asp	Pro	Ala	Gly	Pro	Leu	Phe	Asn	Gly	Lys
	130					135					140				
Pro	His	Gln	Asp	Arg	Leu	Asp	Pro	Ser	Asp	Ala	Gln	Phe	Val	Asp	Val
145					150					155					160
Ile	His	Ser	Asp	Thr	Asp	Gly	Asn	Ala	Pro	Phe	Leu	Val	Ala	Leu	Gly
				165					170					175	
Tyr	Lys	Glu	Pro	Leu	Gly	Asn	Ile	Asp	Phe	Tyr	Pro	Asn	Gly	Gly	Leu
			180					185					190		
Asp	Gln	Pro	Gly	Cys	Pro	Lys	Thr	Ile	Leu	Gly	Gly	Asn	Val	Lys	Glu
		195					200					205			
Met	Ile	Gln	Ala	Ser	Tyr	Ile	Phe	Phe	Leu	Lys	Asn	Asp	Ser	Met	Asp
	210					215					220				
Leu	Ser	Ser	Pro	Lys	Glu	Val	Glu								
225						230									

<210> 37

<211> 452

<212> PRT

<213> Homo sapiens

<400> 37

Met	Leu	Arg	Phe	Tyr	Leu	Phe	Ile	Ser	Leu	Leu	Cys	Leu	Ser	Arg	Ser
1				5					10					15	
Asp	Ala	Glu	Glu	Thr	Cys	Pro	Ser	Phe	Thr	Arg	Leu	Ser	Phe	His	Ser
			20					25					30		
Ala	Val	Val	Gly	Thr	Gly	Leu	Asn	Val	Arg	Leu	Met	Leu	Tyr	Thr	Arg
		35					40					45			
Lys	Asn	Leu	Thr	Cys	Ala	Gln	Thr	Ile	Asn	Ser	Ser	Ala	Phe	Gly	Asn
	50					55					60				
Leu	Asn	Val	Thr	Lys	Lys	Thr	Thr	Phe	Ile	Val	His	Gly	Phe	Arg	Pro
65					70					75					80
Thr	Gly	Ser	Pro	Pro	Val	Trp	Met	Asp	Asp	Leu	Val	Lys	Gly	Leu	Leu
				85					90					95	
Ser	Val	Glu	Asp	Met	Asn	Val	Val	Val	Val	Asp	Trp	Asn	Arg	Gly	Ala
			100					105					110		
Thr	Thr	Leu	Ile	Tyr	Thr	His	Ala	Ser	Ser	Lys	Thr	Arg	Lys	Val	Ala
		115					120					125			
Met	Val	Leu	Lys	Glu	Phe	Ile	Asp	Gln	Met	Leu	Ala	Glu	Gly	Ala	Ser
	130					135					140				
Leu	Asp	Asp	Ile	Tyr	Met	Ile	Gly	Val	Ser	Leu	Gly	Ala	His	Ile	Ser
145					150					155					160
Gly	Phe	Val	Gly	Glu	Met	Tyr	Asp	Gly	Trp	Leu	Gly	Arg	Ile	Thr	Gly
				165					170					175	

Leu	Asp	Pro	Ala	Gly	Pro	Leu	Phe	Asn	Gly	Lys	Pro	His	Gln	Asp	Arg
			180					185					190		
Leu	Asp	Pro	Ser	Asp	Ala	Gln	Phe	Val	Asp	Val	Ile	His	Ser	Asp	Thr
		195					200					205			
Asp	Ala	Leu	Gly	Tyr	Lys	Glu	Pro	Leu	Gly	Asn	Ile	Asp	Phe	Tyr	Pro
	210					215					220				
Asn	Gly	Gly	Leu	Asp	Gln	Pro	Gly	Cys	Pro	Lys	Thr	Ile	Leu	Gly	Gly
225					230					235					240
Phe	Gln	Tyr	Phe	Lys	Cys	Asp	His	Gln	Arg	Ser	Val	Tyr	Leu	Tyr	Leu
				245					250					255	
Ser	Ser	Leu	Arg	Glu	Ser	Cys	Thr	Ile	Thr	Ala	Tyr	Pro	Cys	Asp	Ser
			260					265					270		
Tyr	Gln	Asp	Tyr	Arg	Asn	Gly	Lys	Cys	Val	Ser	Cys	Gly	Thr	Ser	Gln
	275					280						285			
Lys	Glu	Ser	Cys	Pro	Leu	Leu	Gly	Tyr	Tyr	Ala	Asp	Asn	Trp	Lys	Asp
	290					295					300				
His	Leu	Arg	Gly	Lys	Asp	Pro	Pro	Met	Thr	Lys	Ala	Phe	Phe	Asp	Thr
305					310					315					320
Ala	Glu	Glu	Ser	Pro	Phe	Cys	Met	Tyr	His	Tyr	Phe	Val	Asp	Ile	Ile
				325						330				335	
Thr	Trp	Asp	Lys	Asn	Val	Arg	Arg	Gly	Asp	Ile	Thr	Ile	Lys	Leu	Arg
			340					345					350		
Asp	Lys	Ala	Gly	Asn	Thr	His	Arg	Ser	Lys	Ile	Ile	Ser	Asn	Glu	Pro
		355					360					365			
Thr	Thr	Phe	Gln	Lys	Tyr	His	Gln	Val	Ser	Leu	Leu	Ala	Arg	Phe	Asn
	370					375					380				
Gln	Asp	Leu	Asp	Lys	Val	Ala	Ala	Ile	Ser	Leu	Met	Phe	Ser	Thr	Gly
385					390					395					400
Ser	Leu	Ile	Gly	Pro	Arg	Tyr	Lys	Leu	Arg	Ile	Leu	Arg	Met	Lys	Leu
				405					410					415	
Arg	Ser	Leu	Ala	His	Pro	Glu	Arg	Pro	Gln	Leu	Cys	Arg	Tyr	Asp	Leu
			420					425					430		
Val	Leu	Met	Glu	Asn	Val	Glu	Thr	Val	Phe	Gln	Pro	Ile	Leu	Cys	Pro
		435					440					445			
Glu	Leu	Gln	Leu												
			450												

<210> 38
 <211> 450
 <212> PRT
 <213> Homo sapiens

-1

<400> 38															
Met	Gly	Leu	Arg	Ser	His	His	Leu	Ser	Leu	Gly	Leu	Leu	Leu	Leu	Phe
1				5					10					15	
Leu	Leu	Pro	Ala	Glu	Cys	Leu	Gly	Ala	Glu	Gly	Arg	Leu	Ala	Leu	Lys
			20					25					30		
Leu	Phe	Arg	Asp	Leu	Phe	Ala	Asn	Tyr	Thr	Ser	Ala	Leu	Arg	Pro	Val
		35					40					45			
Ala	Asp	Thr	Asp	Gln	Thr	Leu	Asn	Val	Thr	Leu	Glu	Val	Thr	Leu	Ser
	50					55					60				
Gln	Ile	Ile	Asp	Met	Asp	Glu	Arg	Asn	Gln	Val	Leu	Thr	Leu	Tyr	Leu
65					70					75					80
Trp	Ile	Arg	Gln	Glu	Trp	Thr	Asp	Ala	Tyr	Leu	Arg	Trp	Asp	Pro	Asn
				85					90					95	

Ala Tyr Gly Gly Leu Asp Ala Ile Arg Ile Pro Ser Ser Leu Val Trp
 100 105 110
 Arg Pro Asp Ile Val Leu Tyr Asn Lys Ala Asp Ala Gln Pro Pro Gly
 115 120 125
 Ser Ala Ser Thr Asn Val Val Leu Arg His Asp Gly Ala Val Arg Trp
 130 135 140
 Asp Ala Pro Ala Ile Thr Arg Ser Ser Cys Arg Val Asp Val Ala Ala
 145 150 155 160
 Phe Pro Phe Asp Ala Gln His Cys Gly Leu Thr Phe Gly Ser Trp Thr
 165 170 175
 His Gly Gly His Gln Leu Asp Val Arg Pro Arg Gly Ala Ala Ala Ser
 180 185 190
 Leu Ala Asp Phe Val Glu Asn Val Glu Trp Arg Val Leu Gly Met Pro
 195 200 205
 Ala Arg Arg Arg Val Leu Thr Tyr Gly Cys Cys Ser Glu Pro Tyr Pro
 210 215 220
 Asp Val Thr Phe Thr Leu Leu Leu Arg Arg Arg Ala Ala Ala Tyr Val
 225 230 235 240
 Cys Asn Leu Leu Leu Pro Cys Val Leu Ile Ser Leu Leu Ala Pro Leu
 245 250 255
 Ala Phe His Leu Pro Ala Asp Ser Gly Glu Lys Val Ser Leu Gly Val
 260 265 270
 Thr Val Leu Leu Ala Leu Thr Val Phe Gln Leu Leu Leu Ala Glu Ser
 275 280 285
 Met Pro Pro Ala Glu Ser Val Pro Leu Ile Gly Lys Tyr Tyr Met Ala
 290 295 300
 Thr Met Thr Met Val Thr Phe Ser Thr Ala Leu Thr Ile Leu Ile Met
 305 310 315 320
 Asn Leu His Tyr Cys Gly Pro Ser Val Arg Pro Val Pro Ala Trp Ala
 325 330 335
 Arg Ala Leu Leu Leu Gly His Leu Ala Arg Gly Leu Cys Val Arg Glu
 340 345 350
 Arg Gly Glu Pro Cys Gly Gln Ser Arg Pro Pro Glu Leu Ser Pro Ser
 355 360 365
 Pro Gln Ser Pro Glu Gly Gly Ala Gly Pro Pro Ala Gly Pro Cys His
 370 375 380
 Glu Pro Arg Cys Leu Cys Arg Gln Glu Ala Leu Leu His His Val Ala
 385 390 395 400
 Thr Ile Ala Asn Thr Phe Arg Ser His Arg Ala Ala Gln Arg Cys His
 405 410 415
 Glu Asp Trp Lys Arg Leu Ala Arg Val Met Asp Arg Phe Phe Leu Ala
 420 425 430
 Ile Phe Phe Ser Met Ala Leu Val Met Ser Leu Leu Val Leu Val Gln
 435 440 445
 Ala Leu
 450

<210> 39
 <211> 255
 <212> PRT
 <213> Homo sapiens

<400> 39
 Met Val Lys Gly Glu Lys Gly Pro Lys Gly Lys Lys Ile Thr Leu Lys
 1 5 10 15

Val	Ala	Arg	Asn	Cys	Ile	Lys	Ile	Thr	Phe	Asp	Gly	Lys	Lys	Arg	Leu
			20					25					30		
Asp	Leu	Ser	Lys	Met	Gly	Ile	Thr	Thr	Phe	Pro	Lys	Cys	Ile	Leu	Arg
		35					40					45			
Leu	Ser	Asp	Met	Asp	Glu	Leu	Asp	Leu	Ser	Arg	Asn	Leu	Ile	Arg	Lys
		50				55					60				
Ile	Pro	Asp	Ser	Ile	Ser	Lys	Phe	Gln	Asn	Leu	Arg	Trp	Leu	Asp	Leu
65					70					75					80
His	Ser	Asn	Tyr	Ile	Asp	Lys	Leu	Pro	Glu	Ser	Ile	Gly	Gln	Met	Thr
			85						90					95	
Ser	Leu	Leu	Tyr	Leu	Asn	Val	Ser	Asn	Asn	Arg	Leu	Thr	Ser	Asn	Gly
			100					105					110		
Leu	Pro	Val	Glu	Leu	Lys	Gln	Leu	Lys	Asn	Ile	Arg	Ala	Val	Asn	Leu
		115					120						125		
Gly	Leu	Asn	His	Leu	Asp	Ser	Val	Pro	Thr	Thr	Leu	Gly	Ala	Leu	Lys
		130				135					140				
Glu	Leu	His	Glu	Val	Gly	Leu	His	Asp	Asn	Leu	Leu	Asn	Asn	Ile	Pro
145					150					155					160
Val	Ser	Ile	Ser	Lys	Leu	Pro	Lys	Leu	Lys	Lys	Leu	Asn	Ile	Lys	Arg
			165						170					175	
Asn	Pro	Phe	Pro	Lys	Pro	Gly	Glu	Ser	Glu	Ile	Phe	Ile	Asp	Ser	Ile
			180					185					190		
Arg	Arg	Leu	Glu	Asn	Leu	Tyr	Val	Val	Glu	Glu	Lys	Asp	Leu	Cys	Ala
		195					200					205			
Ala	Cys	Leu	Arg	Lys	Cys	Gln	Asn	Ala	Arg	Asp	Asn	Leu	Asn	Arg	Ile
		210				215					220				
Lys	Asn	Met	Ala	Thr	Thr	Thr	Pro	Arg	Lys	Thr	Ile	Phe	Pro	Asn	Leu
225					230					235					240
Ile	Ser	Pro	Asn	Ser	Met	Ala	Lys	Asp	Ser	Trp	Glu	Asp	Trp	Arg	
			245						250					255	

<210> 40
 <211> 214
 <212> PRT
 <213> Homo sapiens

<400> 40

Met	Gln	Ala	Gly	Thr	Gln	Ser	Thr	His	Glu	Ser	Leu	Lys	Pro	Gln	Arg
1				5					10					15	
Val	Gln	Phe	Gln	Ser	Arg	Asn	Phe	His	Asn	Ile	Leu	Gln	Trp	Gln	Pro
		20					25						30		
Gly	Arg	Ala	Leu	Thr	Gly	Asn	Ser	Val	Tyr	Phe	Val	Gln	Tyr	Lys	
		35				40					45				
Ile	Tyr	Gly	Gln	Arg	Gln	Trp	Lys	Asn	Lys	Glu	Asp	Cys	Trp	Gly	Thr
		50				55					60				
Gln	Glu	Leu	Ser	Cys	Asp	Leu	Thr	Ser	Glu	Thr	Ser	Asp	Ile	Gln	Glu
65					70					75					80
Pro	Tyr	Tyr	Gly	Arg	Val	Arg	Ala	Ala	Ser	Ala	Gly	Ser	Tyr	Ser	Glu
			85						90					95	
Trp	Ser	Met	Thr	Pro	Arg	Phe	Thr	Pro	Trp	Trp	Glu	Thr	Lys	Ile	Asp
			100					105					110		
Pro	Pro	Val	Met	Asn	Ile	Thr	Gln	Val	Asn	Gly	Ser	Leu	Leu	Val	Ile
		115					120					125			
Leu	His	Ala	Pro	Asn	Leu	Pro	Tyr	Arg	Tyr	Gln	Lys	Glu	Lys	Asn	Val
		130				135					140				

Ser	Ile	Glu	Asp	Tyr	Tyr	Glu	Leu	Leu	Tyr	Arg	Val	Phe	Ile	Ile	Asn
145					150					155					160
Asn	Ser	Leu	Glu	Lys	Glu	Gln	Lys	Val	Tyr	Glu	Gly	Ala	His	Arg	Ala
			165						170						175
Val	Glu	Ile	Glu	Ala	Leu	Thr	Pro	His	Ser	Ser	Tyr	Cys	Val	Val	Ala
			180					185						190	
Glu	Ile	Tyr	Gln	Pro	Met	Leu	Asp	Arg	Arg	Ser	Gln	Arg	Ser	Glu	Glu
	195						200					205			
Arg	Cys	Val	Glu	Ile	Pro										
	210														

<210> 41
 <211> 231
 <212> PRT
 <213> Homo sapiens

Met	Met	Pro	Lys	His	Cys	Phe	Leu	Gly	Phe	Leu	Ile	Ser	Phe	Phe	Leu
1				5					10					15	
Thr	Gly	Val	Ala	Gly	Thr	Gln	Ser	Thr	His	Glu	Ser	Leu	Lys	Pro	Gln
			20					25					30		
Arg	Val	Gln	Phe	Gln	Ser	Arg	Asn	Phe	His	Asn	Ile	Leu	Gln	Trp	Gln
		35					40					45			
Pro	Gly	Arg	Ala	Leu	Thr	Gly	Asn	Ser	Ser	Val	Tyr	Phe	Val	Gln	Tyr
	50					55					60				
Lys	Ile	Tyr	Gly	Gln	Arg	Gln	Trp	Lys	Asn	Lys	Glu	Asp	Cys	Trp	Gly
65					70					75					80
Thr	Gln	Glu	Leu	Ser	Cys	Asp	Leu	Thr	Ser	Glu	Thr	Ser	Asp	Ile	Gln
				85					90					95	
Glu	Pro	Tyr	Tyr	Gly	Arg	Val	Arg	Ala	Ala	Ser	Ala	Gly	Ser	Tyr	Ser
			100					105					110		
Glu	Trp	Ser	Met	Thr	Pro	Arg	Phe	Thr	Pro	Trp	Trp	Glu	Thr	Lys	Ile
		115					120					125			
Asp	Pro	Pro	Val	Met	Asn	Ile	Thr	Gln	Val	Asn	Gly	Ser	Leu	Leu	Val
	130					135					140				
Ile	Leu	His	Ala	Pro	Asn	Leu	Pro	Tyr	Arg	Tyr	Gln	Lys	Glu	Lys	Asn
145					150					155					160
Val	Ser	Ile	Glu	Asp	Tyr	Tyr	Glu	Leu	Leu	Tyr	Arg	Val	Phe	Ile	Ile
				165					170					175	
Asn	Asn	Ser	Leu	Glu	Lys	Glu	Gln	Lys	Val	Tyr	Glu	Gly	Ala	His	Arg
			180					185					190		
Ala	Val	Glu	Ile	Glu	Ala	Leu	Thr	Pro	His	Ser	Ser	Tyr	Cys	Val	Val
		195					200					205			
Ala	Glu	Ile	Tyr	Gln	Pro	Met	Leu	Asp	Arg	Arg	Ser	Gln	Arg	Ser	Glu
	210					215					220				
Glu	Arg	Cys	Val	Glu	Ile	Pro									
	225					230									

<210> 42
 <211> 263
 <212> PRT
 <213> Homo sapiens

<400> 42

Met	Met	Pro	Lys	His	Cys	Phe	Leu	Gly	Phe	Leu	Ile	Ser	Phe	Phe	Leu
1				5					10					15	
Thr	Gly	Val	Ala	Gly	Thr	Gln	Ser	Thr	His	Glu	Ser	Leu	Lys	Pro	Gln
			20					25					30		
Arg	Val	Gln	Phe	Gln	Ser	Arg	Asn	Phe	His	Asn	Ile	Leu	Gln	Trp	Gln
		35					40					45			
Pro	Gly	Arg	Ala	Leu	Thr	Gly	Asn	Ser	Ser	Val	Tyr	Phe	Val	Gln	Tyr
	50					55					60				
Lys	Ile	Met	Phe	Ser	Cys	Ser	Met	Lys	Ser	Ser	His	Gln	Lys	Pro	Ser
65					70					75				80	
Gly	Cys	Trp	Gln	His	Ile	Ser	Cys	Asn	Phe	Pro	Gly	Cys	Arg	Thr	Leu
				85					90					95	
Ala	Lys	Tyr	Gly	Gln	Arg	Gln	Trp	Lys	Asn	Lys	Glu	Asp	Cys	Trp	Gly
			100					105					110		
Thr	Gln	Glu	Leu	Ser	Cys	Asp	Leu	Thr	Ser	Glu	Thr	Ser	Asp	Ile	Gln
		115					120					125			
Glu	Pro	Tyr	Tyr	Gly	Arg	Val	Arg	Ala	Ala	Ser	Ala	Gly	Ser	Tyr	Ser
	130					135					140				
Glu	Trp	Ser	Met	Thr	Pro	Arg	Phe	Thr	Pro	Trp	Trp	Glu	Thr	Lys	Ile
145					150					155				160	
Asp	Pro	Pro	Val	Met	Asn	Ile	Thr	Gln	Val	Asn	Gly	Ser	Leu	Leu	Val
				165					170					175	
Ile	Leu	His	Ala	Pro	Asn	Leu	Pro	Tyr	Arg	Tyr	Gln	Lys	Glu	Lys	Asn
			180					185					190		
Val	Ser	Ile	Glu	Asp	Tyr	Tyr	Glu	Leu	Leu	Tyr	Arg	Val	Phe	Ile	Ile
		195					200					205			
Asn	Asn	Ser	Leu	Glu	Lys	Glu	Gln	Lys	Val	Tyr	Glu	Gly	Ala	His	Arg
	210					215					220				
Ala	Val	Glu	Ile	Glu	Ala	Leu	Thr	Pro	His	Ser	Ser	Tyr	Cys	Val	Val
225					230					235				240	
Ala	Glu	Ile	Tyr	Gln	Pro	Met	Leu	Asp	Arg	Arg	Ser	Gln	Arg	Ser	Glu
				245					250					255	
Glu	Arg	Cys	Val	Glu	Ile	Pro									
			260												

<210> 43
 <211> 259
 <212> PRT
 <213> Homo sapiens

<400> 43

Met	Tyr	Val	Leu	Ser	Pro	Val	Glu	Phe	Ile	Ile	Leu	Gln	Leu	Leu	Phe
1				5					10					15	
Ile	Gln	Ala	Ile	Ser	Ser	Ser	Leu	Lys	Gly	Phe	Leu	Ser	Ala	Met	Arg
		20						25					30		
Leu	Ala	His	Arg	Gly	Cys	Asn	Val	Asp	Thr	Pro	Val	Ser	Thr	Leu	Thr
		35				40						45			
Pro	Val	Lys	Thr	Ser	Glu	Phe	Glu	Asn	Phe	Lys	Thr	Lys	Met	Val	Ile
	50					55					60				
Thr	Ser	Lys	Lys	Asp	Tyr	Pro	Leu	Ser	Lys	Asn	Phe	Pro	Tyr	Ser	Leu
65					70					75				80	
Glu	His	Leu	Gln	Thr	Ser	Tyr	Cys	Gly	Leu	Val	Arg	Val	Asp	Met	Arg
				85					90					95	
Met	Leu	Cys	Leu	Lys	Ser	Leu	Arg	Lys	Leu	Asp	Leu	Ser	His	Asn	His
			100					105					110		

Ile	Lys	Lys	Leu	Pro	Ala	Thr	Ile	Gly	Asp	Leu	Ile	His	Leu	Gln	Glu
		115					120					125			
Leu	Asn	Leu	Asn	Asp	Asn	His	Leu	Glu	Ser	Phe	Ser	Val	Ala	Leu	Cys
	130					135					140				
His	Ser	Thr	Leu	Gln	Lys	Ser	Leu	Arg	Ser	Leu	Asp	Leu	Ser	Lys	Asn
145					150					155					160
Lys	Ile	Lys	Ala	Leu	Pro	Val	Gln	Phe	Cys	Gln	Leu	Gln	Glu	Leu	Lys
				165					170					175	
Asn	Leu	Lys	Leu	Asp	Asp	Asn	Glu	Leu	Ile	Gln	Phe	Pro	Cys	Lys	Ile
			180					185					190		
Gly	Gln	Leu	Ile	Asn	Leu	Arg	Phe	Leu	Ser	Ala	Ala	Arg	Asn	Lys	Leu
	195						200					205			
Pro	Phe	Leu	Pro	Ser	Glu	Phe	Arg	Asn	Leu	Ser	Leu	Glu	Tyr	Leu	Asp
	210					215					220				
Leu	Phe	Gly	Asn	Thr	Phe	Glu	Gln	Pro	Lys	Val	Leu	Pro	Val	Ile	Lys
225					230					235					240
Leu	Gln	Ala	Pro	Leu	Thr	Leu	Leu	Glu	Ser	Ser	Ala	Arg	Thr	Ile	Leu
				245					250					255	
His	Asn	Arg													

<210> 44
 <211> 416
 <212> PRT
 <213> Homo sapiens

<400> 44

Met	Lys	Leu	His	Cys	Glu	Val	Glu	Val	Ile	Ser	Arg	His	Leu	Pro	Ala
1				5					10					15	
Leu	Gly	Leu	Arg	Asn	Arg	Gly	Lys	Gly	Val	Arg	Ala	Val	Leu	Ser	Leu
			20					25					30		
Cys	Gln	Gln	Thr	Ser	Arg	Ser	Gln	Pro	Pro	Val	Arg	Ala	Phe	Leu	Leu
	35						40				45				
Ile	Ser	Thr	Leu	Lys	Asp	Lys	Arg	Gly	Thr	Arg	Tyr	Glu	Leu	Arg	Glu
	50					55					60				
Asn	Ile	Glu	Gln	Phe	Phe	Thr	Lys	Phe	Val	Asp	Glu	Gly	Lys	Ala	Thr
65					70					75					80
Val	Arg	Leu	Lys	Glu	Pro	Pro	Val	Asp	Ile	Cys	Leu	Ser	Lys	Ala	Ile
			85					90						95	
Ser	Ser	Ser	Leu	Lys	Gly	Phe	Leu	Ser	Ala	Met	Arg	Leu	Ala	His	Arg
			100					105					110		
Gly	Cys	Asn	Val	Asp	Thr	Pro	Val	Ser	Thr	Leu	Thr	Pro	Val	Lys	Thr
		115					120					125			
Ser	Glu	Phe	Glu	Asn	Phe	Lys	Thr	Lys	Met	Val	Ile	Thr	Ser	Lys	Lys
	130					135					140				
Asp	Tyr	Pro	Leu	Ser	Lys	Asn	Phe	Pro	Tyr	Ser	Leu	Glu	His	Leu	Gln
145					150					155					160
Thr	Ser	Tyr	Cys	Gly	Leu	Val	Arg	Val	Asp	Met	Arg	Met	Leu	Cys	Leu
			165						170					175	
Lys	Ser	Leu	Arg	Lys	Leu	Asp	Leu	Ser	His	Asn	His	Ile	Lys	Lys	Leu
		180						185					190		
Pro	Ala	Thr	Ile	Gly	Asp	Leu	Ile	His	Leu	Gln	Glu	Leu	Asn	Leu	Asn
	195						200					205			
Asp	Asn	His	Leu	Glu	Ser	Phe	Ser	Val	Ala	Leu	Cys	His	Ser	Thr	Leu
	210					215					220				

